

WHAT IS CLAIMED IS:

1. A method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE transmission power class information to the RNC, and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving uplink channel condition information of the UE from the UE, and receiving UE transmission power class information from the RNC; and

10 determining a data rate of the UE considering the uplink channel condition information and the total transmission power.

2. The method of claim 1, wherein the uplink channel condition information of the UE is transmission power information of the UE.

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3. The method of claim 2, further comprising the step of calculating transmission power margin information of the UE using the total transmission power and the transmission power information, and determining a data rate of the UE based on the transmission power information and the transmission power margin information.

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4. A method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE transmission power class information to the RNC, and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving transmission power margin information of the UE from the UE, and receiving UE transmission power class information from the RNC; and

determining a data rate of the UE considering the transmission power margin information and the total transmission power.

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5. The method of claim 4, further comprising the step of calculating transmission power information of the UE using the total transmission power and the transmission power margin information, and determining a data rate of the UE based on

the transmission power information and the transmission power margin information.

6. A method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile
5 communication system having UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving uplink channel condition information of the UE and UE transmission power class information from the UE; and

determining a data rate of the UE considering the uplink channel condition
10 information and the total transmission power.

7. The method of claim 6, wherein the uplink channel condition information of the UE is transmission power information of the UE.

15 8. The method of claim 7, further comprising the step of calculating transmission power margin information of the UE using the total transmission power and the transmission power information, and determining a data rate of the UE based on the transmission power information and the transmission power margin information.

20 9. A method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving transmission power margin information of the UE and UE
25 transmission power class information from the UE; and

determining a data rate of the UE considering the transmission power margin information and the total transmission power.

10. A method for determining a data rate of a user equipment (UE) for an
30 enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE transmitting UE transmission power class information to a radio network controller (RNC), and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving uplink channel condition information of the UE from the UE, and receiving total transmission power of the UE from the RNC; and

determining a data rate of the UE considering the received uplink channel condition information and total transmission power.

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11. The method of claim 10, wherein the uplink channel condition information of the UE is transmission power information of the UE.

12. The method of claim 11, further comprising the step of calculating 10 transmission power margin information of the UE using the total transmission power and the transmission power information, and determining a data rate of the UE based on the transmission power information and the transmission power margin information.

13. A method for determining a data rate of a user equipment (UE) for an 15 enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE transmitting UE transmission power class information to a radio network controller (RNC), the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving transmission power margin information of the UE from the UE, and 20 receiving total transmission power from the RNC; and

determining a data rate of the UE considering the transmission power margin information and the total transmission power.

14. A method for determining a data rate of a user equipment (UE) for an 25 enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving at the Node B transmission power information and transmission power margin information of the UE from the UE; and

30 determining a data rate of the UE considering the transmission power information and the transmission power margin information.

15. A method for determining a data rate of a user equipment (UE) for an

enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE transmission power class information to the RNC, and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

5 receiving uplink channel condition information of the UE from the UE, and receiving maximum allowed uplink transmission power information of the UE from the RNC; and

determining a data rate of the UE considering the received uplink channel condition information and maximum allowed uplink transmission power information.

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16. The method of claim 15, wherein the uplink channel condition information of the UE is transmission power information of the UE.

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17. The method of claim 16, further comprising the step of calculating transmission power margin information of the UE using the maximum allowed uplink transmission power information and the transmission power information, and determining a data rate of the UE considering the transmission power information and the transmission power margin information.

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18. A method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having a radio network controller (RNC), the UE transmitting UE transmission power class information to the RNC, and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

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receiving transmission power margin information of the UE from the UE, and receiving maximum allowed uplink transmission power information of the UE from the RNC; and

determining a data rate of the UE considering the received transmission power margin information and maximum allowed uplink transmission power information.

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19. The method of claim 18, further comprising the step of calculating transmission power information of the UE using the maximum allowed uplink transmission power information and the transmission power margin information, and

determining a data rate of the UE considering the transmission power information and the transmission power margin information.

20. A method for determining a data rate of a user equipment (UE) for an
5 enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving uplink channel condition information of the UE from the UE, and receiving maximum allowed uplink transmission power information and UE
10 transmission power class information from the RNC; and

determining a data rate of the UE considering information having a smaller value out of the maximum allowed uplink transmission power information and the total transmission power information, and the uplink channel condition information.

15 21. The method of claim 20, wherein the uplink channel condition information of the UE is transmission power information of the UE.

22. The method of claim 21, further comprising the step of calculating transmission power margin information of the UE using information having a value less
20 than the maximum allowed uplink transmission power information and the total transmission power information, and the transmission power information, and determining a data rate of the UE considering the transmission power information and the transmission power margin information.

25 23. A method for determining a data rate of a user equipment (UE) for an enhanced uplink dedicated channel (EUDCH) service by a Node B in a mobile communication system having the UE and the Node B supporting the EUDCH service of the UE, the method comprising the steps of:

receiving at the Node B transmission power margin information of the UE
30 from the UE, and receiving at the Node B maximum allowed uplink transmission power information and UE transmission power class information from the RNC; and

determining a data rate of the UE considering information having a value less than the maximum allowed uplink transmission power information and the total

transmission power information, and the transmission power margin information.

24. The method of claim 23, further comprising the step of calculating transmission power information of the UE using information having a value less than 5 the maximum allowed uplink transmission power information and the total transmission power information, and the transmission power margin information, and determining a data rate of the UE considering the transmission power information and the transmission power margin information.